

Comments of the Texas Public Policy Foundation on the Federal Communications Notice of Proposed Rulemaking In the Matter of Preserving the Open Internet Broadband Industry Practices

GN Docket No. 09-191

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The Federal Communications Commission (FCC) recently announced its intention to adopt regulations to govern the Internet in the name of network neutrality.<sup>1</sup> It proposes to codify four general Internet policy principles adopted informally in 2005 plus two new principles.

The six “net neutrality” principles the FCC seeks to codify are:

1. *Subject to reasonable network management, a provider of broadband Internet access service may not prevent any of its users from sending or receiving the lawful content of the user’s choice over the Internet.*
2. *Subject to reasonable network management, a provider of broadband Internet access service may not prevent any of its users from running the lawful applications or using the lawful services of the user’s choice.*
3. *Subject to reasonable network management, a provider of broadband Internet access service may not prevent any of its users from connecting to and using on its network the user’s choice of lawful devices that do not harm the network.*
4. *Subject to reasonable network management, a provider of broadband Internet access service may not deprive any of its users of the user’s entitlement to competition among network providers, application providers, service providers, and content providers.*
5. *Subject to reasonable network management, a provider of broadband Internet access service must treat lawful content, applications, and services in a nondiscriminatory manner.*
6. *Subject to reasonable network management, a provider of broadband Internet access service must disclose such information concerning network management and other practices as is reasonably required for users and content, application, and service providers to enjoy the protections specified in this part.*

The FCC’s Notice of Proposed Rulemaking states that codifying these principles will achieve several goals. These goals are to promote investment and innovation with respect to the Internet, promote competition for Internet access and Internet content, and to protect users’ interests (including consumer protection).<sup>2</sup>

The Texas Public Policy Foundation opposes the adoption in rule of the proposed principles. They are unneeded and, worse, will hinder the achievement of the very goals they are intended to promote. In fact, the current marketplace has fostered investment and innovation, protected users’ interests and promoted competition, there is no need for the FCC to step in and create burdensome regulation.

Thomas Hazlett, former chief economist for the FCC, published an examination of the past decade of open access regulation in the US. He compared subscription growth for cable and DSL service. Hazlett

found that at each stage of reduced regulation, growth in DSL subscriptions accelerated.<sup>3</sup> Growth is the end result of investment and innovation spurred by competition in a free market.

## **Net Neutrality Regulations are Unnecessary and Will Harm Innovation, Competition, and Consumer Welfare**

The following discussion examines the Internet marketplace in order to show that the proposed rule is unnecessary and will harm innovation, competition, and consumer welfare. The discussion is centered on four areas.

### **I. Network management and prioritization by providers in a competitive environment preserve Internet access and traffic efficiency**

The FCC states in their notice of proposed rulemaking, that the volume of Internet traffic is increasing rapidly, and providers are dealing with this traffic by prioritizing transmissions of particular content, applications, and services.<sup>4</sup> From this, they infer that although the Internet has worked well until this point, the increasing traffic indicates that changes need to be made.<sup>5</sup> FCC Chairman Genachowski has stated that net neutrality regulations are needed so that all Internet traffic, regardless of speed, origin, or bandwidth, is treated equally.<sup>6</sup>

Even so, most proponents of net neutrality rules concede that some prioritization of traffic is necessary. Internet networks have always prioritized traffic on the Internet.<sup>7</sup> In a neutral network, all bits contend with each other to pass through the lines, causing bits to collide. When bits collide they slow down. Sometimes they don't reach their destination and need to be retransmitted. Often they don't make it at all.<sup>8</sup> If every content creator had access through the Internet lines without prioritization, there would be a significant possibility of increased line jamming, and consumers not getting the information they need. The Internet would soon start looking like urban freeways during rush hour traffic.

As such, each of the proposed FCC principles contains a "reasonable network management" exception that allows for some prioritization as follows:

- to reduce or mitigate the adverse effects of congestion on its network or to address quality-of-service concerns
- to address harmful traffic or traffic unwanted by users
- to address unlawful conduct on the Internet; and
- to maintain the proper functioning of their networks<sup>9</sup>

There is no "brightline" or threshold for what qualifies as "reasonable" under the statute.<sup>10</sup> In fact, the notice of proposed rulemaking states that the term "reasonable" has a circular definition. The "reasonableness" exemption is so vague, that the ambiguity will lead to more confusion and eventually increase the amount of litigation over Internet issues. Arguments by proponents of regulation show it is also likely that this vagueness will be used to lead to a practical standard of reasonableness that will deter innovation and investment, as well as serve as a roadblock for start-ups, thus inhibiting competition, and ultimately creating the very problems that these rules are intended to prevent.<sup>11</sup>

The FCC's own regulatory actions also lead to this conclusion. It found that Comcast violated "federal Internet policy" in interfering with use for certain subscribers; in this case, consumers who were using peer-to-peer software to exchange, bandwidth-heavy video.<sup>12</sup> Comcast was trying to manage the growing trend of a few users creating congestion that interfered—or threatened to interfere—with the

usage of the vast majority of its subscribers. Yet the FCC's action against Comcast clearly shows that it has determined that this effort "to reduce or mitigate the adverse effects of congestion" is not reasonable.

The FCC has not demonstrated why network management cannot be left in the hands of service providers. Nor has it demonstrated that its regulation of network management or prioritization would serve any valid purpose. Instead, it has demonstrated that this regulation would significantly interfere with proper network management of the Internet.

## II. The current competitive environment has created significant growth

Increasing the number of Internet users is a priority for the FCC. The FCC states in their notice of rulemaking that in many parts of the United States, customers have limited options for high-speed broadband Internet access service.<sup>13</sup>

Creating these rules to increase the number of users presupposes the argument that the number of users is not already increasing in the current market. However, the FCC data shows that under the status quo, the number of Internet users has shown significant growth over the last decade, with the rate of growth increasing even more in the last four years.

The latest FCC data shows that Texas had 137 high speed ISPs offering service to 9,110,055 customers in 2008—up from 3,466,494 customers in 2005, and 88% of end-user premises with access to DSL and 96% to cable broadband. Since 2001, the number of broadband subscribers in Texas has grown more than 1015 percent.<sup>14</sup> That is a growth of more than 5.6 million customers in the last four years. Additionally, the numbers show that of the 9 million total customers, 8,745,653 have access to cable broadband speed or better.<sup>15</sup> To put this in perspective, the current number of Internet subscribers with broadband access totals more than 2.5 times the total number of all Internet users just four years ago.<sup>16</sup>

The Texas Public Utility Commission (PUCT) confirms the FCC data. In 2007, the PUCT determined that "no evidence exists that any broadband provider has yet affected customer choice of Internet-enabled applications employed in association with broadband service in Texas."<sup>17</sup> The PUCT went on to find that there were "no compelling reasons" to add any additional restrictions or regulations to current law.

Texas is not the only state to experience this tremendous growth over the last several years:

### Broadband Subscribers in Texas as Compared to Other States

State	Jun. 2001	Jun. 2002	Jun. 2003	Jun. 2004	Jun. 2005	Jun. 2006	Jun. 2007	% Change 2001-07
California	1,639,921	2,527,275	3,378,373	4,608,822	5,954,876	9,395,265	14,466,700	782%
Texas	614,704	1,015,245	1,571,250	2,203,490	2,943,487	4,357,437	6,855,680	1015%
New York	811,386	1,364,556	1,891,457	2,349,956	3,067,983	4,854,803	6,797,126	738%
Florida	634,703	1,103,236	1,634,552	2,236,963	2,958,350	4,408,427	6,349,084	900%
Illinois	325,085	525,817	840,632	1,270,907	1,817,481	2,666,304	4,305,351	1224%

New Jersey	394,198	654,235	924,835	1,194,557	1,605,301	2,654,674	4,150,053	953%
Penn.	249,119	501,950	755,947	1,123,876	1,578,981	2,646,898	4,120,573	1554%
National	9,241,996	15,787,647	22,995,444	31,950,574	42,517,810	65,270,912	100,921,647	992%

Source: *High-Speed Services for Internet Access, FCC (March 2008)*

The graph clearly shows that states across the country are growing at significant rates. Nationally, the number of broadband subscribers has grown by almost 1000% between 2001 and 2007.<sup>18</sup> The number of users has continued to grow since 2007 as well. Between 2008 and 2009, adoption in the US soared from 55% to 63%.<sup>19</sup> In only a few years, if broadband growth continues unabated, the market will be saturated. The increased number of broadband users has led to an increase number of broadband providers. As of June 2006, 95.6% of US ZIP codes were served by two or more broadband service providers (including satellite broadband), and 87.4% of US ZIP codes were served by three or more broadband service providers.<sup>20</sup>

Even in areas considered slow growth, such as rural areas, the numbers show an increasing number of providers and end-users. The number of underserved areas is shrinking each year, and the number with two or more providers is growing. From June 2004 - June 2005 alone, the number of ZIP codes with no provider shrank by nearly two-thirds, from 5.7% to 2%. The number with only one provider shrank by about a third from 13.8% to 9.2%.<sup>21</sup>

So rural areas are not really slow growth. To the extent that market penetration in these areas is behind urban areas, two primary explanations stand out. First, consumer demand for broadband is simply not strong enough in some areas. Yet the numbers show that market penetration is rising rapidly despite these challenges. Second, government regulations at all levels stifle entry into the broadband marketplace.<sup>22</sup> This challenge is a much more serious impediment to growth. In most states, a provider wishing to lay new wire for the purpose of delivering broadband services to residential communities must first obtain approval from a local franchise authority.<sup>23</sup> This process tends to be needlessly cumbersome and expensive, and at times has prevented companies from continuing with their plans for broadband deployment.<sup>24</sup> Thus it is excessive government regulation—not the lack thereof—that is the issue that needs to be addressed to increase access to broadband Internet.

### **III. Growing competitive markets prevent discrimination and increase competition**

Proponents of net neutrality laws state that rapid growth of the Internet creates the potential that a few ISPs will also grow large enough to gain significant market share, acting as a monopoly on the system. The FCC has publicly stated its concern that a few large ISPs will manipulate competition and stifle innovation.<sup>25</sup> While this has happened in other markets, the unique make up of this market makes this possibility a near impossibility.

In today's rapidly growing and competitive broadband market, network practices that didn't satisfy consumers would quickly send them to another provider.<sup>26</sup> In fact, the availability of priority services represents an opportunity for start-ups. New firms typically need to differentiate themselves from their established rivals, as well as to establish a good reputation with consumers. The availability of priority service would provide a chance for startup providers that promised not to prioritize certain traffic over others. That opportunity would not exist in a one-size-fits-all world.<sup>27</sup> Additionally, network owners themselves have every incentive to encourage innovation on the Internet because they profit only if the

Internet prospers. The competitiveness and incentives in the current market for broadband Internet access services is sufficient to allay any fears of a monopolistic situation.<sup>28</sup>

Additionally, the engineers and scientists who volunteer to develop the evolving set of protocols that govern the Internet collaborate to ensure that Internet capacity continues to grow and adapt to new needs and challenges. This process works remarkably well and shows no signs of falling apart. In a free market environment, competitive and innovation will ensure this remains the case. The main threat to the universal access to content is the centralized management of content under net neutrality regulations that create congestion and place national restrictions on content.<sup>29</sup>

#### **IV. Providers are Uniquely Suited to Innovate and Invest in their Networks**

The FCC indicates that the current growth may lead to capacity constraints. For example, the average broadband subscriber uses about two gigabytes of data per month. Internet-based television systems would consume 100 times as much—224 gigabytes. As we move towards high-definition formatting, the average user would consumer over one terabyte a month.<sup>30</sup> John Chambers, CEO of Cisco Systems, projects a four to six times increase in Internet traffic over the next decade.<sup>31</sup>

With the increase in Internet traffic, both proponents and opponents of net neutrality regulation agree that the only way to prevent the system from “cracking” is to innovate. Innovation leads to the advancement of applications and services.

Supporters of regulation argue that the fees and other investment arrangements currently in place by ISPs would drive small Internet entrepreneurs out of business, hurting competition and innovation.<sup>32</sup> As previously discussed, however, the current market helps start-ups enter the market by allowing them to differentiate themselves from established rivals. Differentiation in pricing or quality of service may enable different types of innovation that might not be feasible with a network lacking such capabilities.<sup>33</sup> By actively managing traffic flow, network owners could use scarce Internet capacity more efficiently. Additionally, traffic fees could spur some much-needed investment in broadband networks.<sup>34</sup>

Even while lobbying for net neutrality rules, the FCC admits that network equipment makers have responded well to the rapid growth, responding with new technologies, and more sophisticated routers that enable network operators to distinguish among different classes of traffic.<sup>35</sup> In other words, the FCC has acknowledged that the Internet is growing and that the current ISPs have done a great job advancing with the marketplace. The numbers agree. The broadband companies have invested huge sums in the Internet infrastructure, including \$70 billion last year alone.<sup>36</sup> These funds are available primarily because of the network providers’ ability to manage their own networks.<sup>37</sup>

Net neutrality regulations will only stifle innovation. Decentralized knowledge has best been able to synthesize varying consumer preferences and economic interests.<sup>38</sup> Centralizing this knowledge through government mandates will make the Internet vulnerable to political manipulation and stifle the innovation that comes from varied sources in a competitive environment. With existing lines effectively provided by government, there would be no incentive to build new capacity, especially when those new lines would be subject to the same requirements.<sup>39</sup>

#### **Conclusion**

FCC guidelines state that the goal of any regulatory act must be to utilize measures that promote competition.<sup>40</sup> As previously explained, ISPs have added nearly 2 million customers per year under the current system. This growth has led to more Internet users and increased the number of Internet

providers to the point that 87% of users have access to two or more broadband providers. The numbers indicate that the current market is experiencing unprecedented growth, investment and innovation, and competition.

If the FCC begins mandating the flow of content and bandwidth over the ISPs' lines, ISPs will not be able to prioritize traffic and thus cannot properly manage their networks. If the ISPs cannot manage their own lines, there is no incentive for them to invest in the innovation that makes their lines better than the competition. This will ultimately cause price increases and stagnant growth.

By its own admission, the FCC has a duty to preserve and promote the open character of the Internet and the telecommunications marketplace. This duty extends to ensuring consumers benefit from the innovation that comes from competition. Regulation will only cause uncertainty, causing discouragement and delay in investment in planned critical infrastructure.<sup>41</sup>

Imposing a new, separate set of rules on the Internet would invite endless uncertainty and litigation, hurt innovation, investment, and Internet users.<sup>42</sup> While there are concerns that this environment could change in the future, advancing rules that ensure change without ensuring results is premature.

Texas Public Policy Foundation [TPPF] believes that for the reasons listed above, the proposed rules are harmful to the innovative and competitive environment that is built upon the Internet.

Specifically, the Foundation opposes the adoption of the proposed rules as follows:

1. Subject to reasonable network management, a provider of broadband Internet access service may not prevent any of its users from sending or receiving the lawful content of the user's choice over the Internet.

TPPF opposes the adoption of proposed principle number one by incorporating the arguments listed in these comments, and on the basis that the wording of the proposed rule is vague and ambiguous. TPPF also objects to the overly regulatory nature of the rule, effectively preventing network operators from managing the traffic over their own lines; preventing network management will slow growth, decrease competition, and stifle innovation.

2. Subject to reasonable network management, a provider of broadband Internet access service may not prevent any of its users from running the lawful applications or using the lawful services of the user's choice, should not be adopted.

TPPF opposes the adoption of proposed principle number two by incorporating the arguments listed in these comments. Additionally, TPPF objects on the basis that the wording is vague and ambiguous. TPPF also objects through the overwhelming evidence that shows the increasing Internet traffic does not prevent users from running applications, but actually promotes more users running applications, increasing the number of providers, and creating investment.

3. Subject to reasonable network management, a provider of broadband Internet access service may not prevent any of its users from connecting to and using on its network the user's choice of lawful devices that do not harm the network.

TPPF opposes the adoption of proposed principle number three by incorporating the arguments listed in these comments. Additionally, TPPF objects on the basis that the wording is vague and ambiguous. Adoption of this rule presupposes the market is failing in the status quo, even with no evidence to

support such a finding. In fact, adopting this rule could prevent users from connecting by regulating the amount of providers currently, and thus decreasing competitive choices for consumers.

4. Subject to reasonable network management, a provider of broadband Internet access service may not deprive any of its users of the user's entitlement to competition among network providers, application providers, service providers, and content providers

TPPF opposes the adoption of proposed principle number four by incorporating the arguments listed in these comments. Additionally, TPPF objects on the basis that the wording is vague and ambiguous. Specifically, the proposed rule is based on the assumption that users are entitled to a property right in the providers' property beyond any contractual obligations of the providers. This is a false assumption. Principle number four is in essence tortious interference in the relationship between providers and their users and a taking of the providers' property.

5. Subject to reasonable network management, a provider of broadband Internet access service must treat lawful content, applications, and services in a nondiscriminatory manner.

TPPF opposes the adoption of proposed principle number five by incorporating the arguments listed in these comments. Additionally, TPPF objects on the basis that the wording is vague and ambiguous, particularly with the "reasonable network management" exemption. Specifically, this proposed rule forces the FCC to discriminate "socially beneficial discrimination from socially harmful discrimination."<sup>43</sup> The problematic nature of this discrimination is evidenced in the FCC's proposed rule. It prohibits a "broadband Internet access service provider [from charging] a content, application, or service provider for enhanced or prioritized access to ... subscribers."<sup>44</sup> Instead, it allows providers to charge *consumers* for the services of these different providers, "We propose that this rule would not prevent a broadband Internet access service provider from charging subscribers different prices for different services."<sup>45</sup> Not only does this proposed principle shift costs from content providers to consumers, it may also interfere with discrimination, i.e., prioritization, based on reasonable network management. Prioritization is crucial for the upkeep and successful dispersion of data. The artificial distinction the FCC attempts to make between discrimination and prioritization will lead to congestion and loss of data.

6. Subject to reasonable network management, a provider of broadband Internet access service must disclose such information concerning network management and other practices as is reasonably required for users and content, application, and service providers to enjoy the protections specified in this part.

TPPF opposes the adoption of proposed principle number six by incorporating the arguments listed in these comments. Additionally, TPPF objects on the basis that the wording is vague and ambiguous. Specifically, this proposed rule does not define what language or activity is to be disclosed or otherwise reported. As such, the proposed rule fails on its face. Additionally, this sort of vagueness will only lead to more litigation amongst the organizations, increasing costs, deterring new competitors and ultimately stifling innovation and the Internet entirely.

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<sup>1</sup> Federal Communications Commission, Notice of Proposed Rulemaking, FCC 09-03, GN Docket No.09-191 (October 22, 2009)

<sup>2</sup> Ibid, p.20-23, also see p. 25.

<sup>3</sup> Thomas W. Hazlett, "Natural Experiments in U.S. Broadband Regulation." *Review of Network Economics*, Vol. 7, Issue 4. December 2008.

<sup>4</sup> Ibid, p. 4.

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- <sup>5</sup> FCC, Notice of Proposed Rulemaking, paragraph 15.
- <sup>6</sup> David Nicklaus, "Net Neutrality isn't a neutral term, and it isn't good for the Net." St. Louis Post-Dispatch, Sept. 25, 2009
- <sup>7</sup> Cecilia Kang, "Computer Science Professor, Former FCC Official Warns Against Net Neutrality, Washington Post, Sept. 25, 2009, [http://voices.washingtonpost.com/posttech/2009/09/computer\\_science\\_professor\\_for.html](http://voices.washingtonpost.com/posttech/2009/09/computer_science_professor_for.html)
- <sup>8</sup> Nick Schulz, *Net Neutrality's Threat to the Future of Media*, Real Clear Markets (Aug. 11, 2009). AEI.
- <sup>9</sup> FCC, Notice of Proposed Rulemaking, paragraph 137 ff.
- <sup>10</sup> Ed Felten. "Net Neutrality: When is Network Management 'Reasonable'?" Oct. 26, 2009. <http://www.freedom-to-tinker.com/blog/felten/net-neutrality-when-network-management-reasonable>
- <sup>11</sup> Ibid.
- <sup>12</sup> Mike Scarcella, "Appeals Court Warm to Comcast in Fight Against FCC." Typepad.com, Jan. 8, 2010; *summarizing* D.C. Appellate argument at [www.dcappeals.gov](http://www.dcappeals.gov)
- <sup>13</sup> FCC, Notice of Proposed Rulemaking, paragraph 29.
- <sup>14</sup> Federal Communications Commission, Wireline Competition Bureau, Presentation of the Section 706 Report. March 19, 2008. [http://www.fcc.gov/WCB\\_031908\\_open\\_meeting\\_slides.pdf](http://www.fcc.gov/WCB_031908_open_meeting_slides.pdf).
- <sup>15</sup> FCC, Wireline Competition Bureau.
- <sup>16</sup> FCC, High-Speed Services for Internet Access: Status as of Dec. 31, 2005
- <sup>17</sup> Public Utility Commission Self-Evaluation Report, "A Report to the Texas Sunset Advisory Commission." Sept. 2009. P. 78.
- <sup>18</sup> Federal Communications Commission, Presentation of § 706 Report. March 19, 2008.
- <sup>19</sup> Wayne Crews, Comments of the Competitive Enterprise Institute, Before the FCC GN Docket No. 09-51 (In the Matter of A National Broadband Plan for our Future. p. 3
- <sup>20</sup> Danny Adams, "Broadband Deployment Likely to be Key Topic At FCC." IP Business News. Jan. 7, 2010; *see also* Singer, Hal J. *Net Neutrality: A Radical Form of Non-Discrimination*, Criterion Economics (Summer 2007).
- <sup>21</sup> James L. Gattuso, *Broadband Regulation: Will Congress Neuter the Net?* (2006).
- <sup>22</sup> Crews, Comments of the Competitive Enterprise Institute, p. 16
- <sup>23</sup> Diane Katz, *Assessing the Case for Cable Franchise Reform* (July 2, 2007).
- <sup>24</sup> Crews, Comments of the Competitive Enterprise Institute, p. 16
- <sup>25</sup> Allan Leinwand, "[Why Net Neutrality Is Important for Startups, Innovation](#)," Gigaom, Dec. 6, 2009.
- <sup>26</sup> Gattuso, *Broadband Regulation: Will Congress Neuter the Net?* (2006), p. 4
- <sup>27</sup> Ibid.
- <sup>28</sup> Daniel F. Spulber & Christopher S. Yoo, *Rethinking Broadband Internet Access*, 22 Harv. J.L. & Tech. 1 (2008)
- <sup>29</sup> Nick Schulz, *Net Neutrality's Threat to the Future of Media*, Real Clear Markets (Aug. 11, 2009). AEI.
- <sup>30</sup> Gattuso, *Broadband Regulation: Will Congress Neuter the Net?* (2006), p. 4.
- <sup>31</sup> Ibid.
- <sup>32</sup> Ibid.
- <sup>33</sup> Christopher S. Yoo, *Network Neutrality, Consumers, and Innovation*, 2008 U.Chi. Legal F. 179, 227-38 (2008).
- <sup>34</sup> Gattuso, p.22.
- <sup>35</sup> Ibid, 24.
- <sup>36</sup> Nicklaus, "Net Neutrality isn't a neutral term, and it isn't good for the Net."
- <sup>37</sup> Ibid.
- <sup>38</sup> Competitive Enterprise Institute, "Net Neutrality rules depress investment, reduce competition", [CeI.org/issue/2](http://CeI.org/issue/2)
- <sup>39</sup> Crews, Comments of the Competitive Enterprise Institute, Before the FCC, p. 3.
- <sup>40</sup> Telecommunications Act of 1996, Pub. LA. No. 104-104, 110 Stat. 56 § 706 (1996).
- <sup>41</sup> Kay Bailey Hutchison, U. S. Senate, Open Letter to Julius Genachowski FCC Commissioner, Oct. 13, 2009.
- <sup>42</sup> Gattuso, *Broadband Regulation: Will Congress Neuter the Net?*
- <sup>43</sup> FCC, Notice of Proposed Rulemaking, paragraph 103.
- <sup>44</sup> Ibid, paragraph 106.
- <sup>45</sup> Ibid.